

WHAT IS CLAIMED:

1. A circuit interrupting device having a detection circuit, at least one pair of load terminals and at least one pair of line terminals, the circuit interrupting device comprises:

5 a current limiting circuit coupled to at least one of the line terminals of the device to pass a current for a defined interval of time and of a sufficient magnitude to trip the circuit interrupting device when such device is reverse wired.

2. The device of claim 1 wherein the at least one pair of line terminals are adapted to be connected to a phase conductor and a neutral conductor and the current
10 limiting circuit is coupled between the terminal that is to be connected to the phase conductor and a ground terminal.

3. The device of claim 2 wherein the current limiting circuit comprises a diode in series with a first resistor and a capacitor.

4. The device of claim 3 wherein the first resistor is in series with the
15 capacitor.

5. The device of claim 4 wherein a second resistor is coupled in parallel with the capacitor.

6. The device of claim 5 wherein the value of the first resistor determines the ground fault current as the capacitor charges and the value of the capacitor determines the
20 length of time that this current flows.

7. The device of claim 5 wherein the second resistor discharges the capacitor after the circuit interrupting device has tripped and has a value which limits the current through it to a value that is below a specific value.

8. The device of claim 5 wherein the anode of the diode is connected to the
25 terminal of the device that is to be connected to the phase conductor.

9. The device of claim 5 wherein the cathode of the diode is connected to the terminal of the device that is to be connected to the phase conductor.

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